Patent
Attorney's Docket No. 032264-002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Thomas J. Taylor et al.

Application No.: 10/038,739

Filed: January 2, 2002

For: POLYCARBOXY/POLYOL FIBERGLASS BINDER

Group Art Unit: 1713

Examiner: Marie L. Reddick

Confirmation No.: 3736

FACSIMILE COVER SHEET

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

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Patent

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In re Patent Application of
Thomas J. Taylor et al.
Application No.: 10/038,739
Filing Date: January 2, 2002
Title: POLYCARBOXY/POLYOL FIBERGLASS BINDER

Group Art Unit: 1713
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Confirmation No.: 3736

AMENDMENT/REPLY TRANSMITTAL LETTER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed is a reply for the above-identified patent application.

☐ A Petition for Extension of Time is also enclosed.

☐ Terminal Disclaimer(s) and the ☐ $65.00 (2814) ☐ $130.00 (1814) fee per Disclaimer due under 37 C.F.R. § 1.20(d) are also enclosed.

☐ Also enclosed is/are _____

☐ Small entity status is hereby claimed.

☐ Applicant(s) requests continued examination under 37 C.F.R. § 1.114 and enclose the ☐ $395.00 (2801) ☐ $790.00 (1801) fee due under 37 C.F.R. § 1.17(e).

☐ Applicant(s) requests that any previously unentered after final amendments not be entered. Continued examination is requested based on the enclosed documents identified above.

☐ Applicant(s) previously submitted _____ on _____ for which continued examination is requested.

☐ Applicant(s) requests suspension of action by the Office until at least _____, which does not exceed three months from the filing of this RCE, in accordance with 37 C.F.R. § 1.103(c). The required fee under 37 C.F.R. § 1.17(i) is enclosed.

☐ A Request for Entry and Consideration of Submission under 37 C.F.R. § 1.129(a) (1809/2809) is also enclosed.

Attorney Docket No. 032264-002
Application No. 10/038,739

☒ No additional claim fee is required.

☐ An additional claim fee is required, and is calculated as shown below.

AMENDED CLAIMS					
	No. of Claims	Highest No. of Claims Previously Paid For	Extra Claims	Rate	Additional Fee
Total Claims		MINUS =	0	x $50.00 (1202) =	$ 0.00
Independent Claims		MINUS =	0	x $200.00 (1201) =	$ 0.00
If Amendment adds multiple dependent claims, add $360.00 (1203)					
Total Claim Amendment Fee					$ 0.00
☐ Small Entity Status claimed - subtract 50% of Total Claim Amendment Fee					$ 0.00
TOTAL ADDITIONAL CLAIM FEE DUE FOR THIS AMENDMENT					$ 0.00

☐ A check in the amount of _____ is enclosed for the fee due.

☐ Charge _____ to Deposit Account No. 02-4800.

☐ Charge _____ to credit card. Form PTO-2038 is attached.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

Date: August 5, 2005

By _____
E. Joseph Gess
Registration No. 28,510

Patent
Attorney's Docket No. 032264-002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	**Mail Stop Amendment**
Thomas J. Taylor et al.	Group Art Unit: 1713
Application No.: 10/038,739	Examiner: Marie L. Reddick
Filed: January 2, 2002	Confirmation No.: 3736
For: POLYCARBOXY/POLYOL FIBERGLASS BINDER	

RESPONSE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In complete response to the outstanding Official Action issued on February 7, 2005, Applicants submit the following comments.

Initially, the Examiner's withdrawal of the rejection in the Office Action issued November 17, 2004, which crossed in the mail with the Amendment and Affidavits previously submitted, is acknowledged with appreciation. Accordingly, we hereby focus upon the outstanding Official Action issued February 7, 2005 and the rejections issued therein.

Turning now to the outstanding Office Action, the Examiner initially rejects the claims of record, i.e. claims 1, 5, 7, 8 and 10-20 under 35 U.S. § 102 as being anticipated by, or in the alternative, under 35 U.S.C. § 103 as being obvious over Strauss (U.S. Patent No. 5,318,990). For the following reasons, however, the Examiner's rejection is most respectfully traversed by Applicants.

Strauss does disclose a fiberglass binder comprising a polycarboxy polymer, a trihydric alcohol and a catalyst. Strauss also specifically notes that the ratio of

polycarboxy polymer to trihydric alcohol may vary over wide limits from about 0.5 to about 1.5, but is preferably from about 0.7 to about 1.0 hydroxyl groups/carboxyl groups. The specific molecular weight of the polycarboxy polymer, and the importance of same to the synergy with the specific ratio are nowhere disclosed in Strauss. In other words, one of ordinary skill in the art reading Strauss would in no manner be apprised of the importance of combining the low molecular weight polymer with a ratio of equivalence of hydroxyl groups to equivalence of carboxy groups in the range a from about 0.6 to 0.8, while also having the molecular weight of 5,000 or less, and specifically maintaining the viscosity of the binder solution from 20cP to about 100cP. The viscosity of the binder solution emphasizes the low molecular weight that is needed in order to obtain the excellent results and the results of the present invention as recognized by the low molecular weight and the specific hydroxyl groups/carboxy groups ratio. Such a recognition is nowhere disclosed in Strauss.

It is noted that several of the examples in Strauss utilize a polyacrylic acid of a molecular weight of 2100. However, in each instance, when the low molecular weight polyacrylic acid is employed, a substantial amount of polyacrylic acid having a molecular weight of 60,000 is also employed. The presence of such high molecular weight polymer underscores that fact Strauss does not and can not suggest to the skilled artisan the importance of combining low molecular weight polymer with the specific ratio, such that the recited viscosity is also realized. In fact, the presence of the high molecular weight polymer is believed to adversely impact the properties as the importance of the low molecular weight in combination with the recited ratio would not be realized. It is believed that the presence of the high molecular polymer

would cause the binder solution to have a viscosity of greater that 100 cps. The high molecular polymer is very viscous and its presence would therefore cause the viscosity to be much higher than 100 cps. Thus, one of ordinary skill in the art reading Strauss would not deem Applicants claimed invention, with its recitation of the low molecular weight polymer, the specific hydroxyl/carboxy group ratio, and its viscosity to be anticipated. Moreover, one of ordinary skill in the art reading Strauss would also not find it obvious to focus upon maintaining low molecular weight polymer and the particular ratio with no other additives such that the viscosity is met. The inclusion of the high molecular weight polymer as demonstrated in the examples of Strauss would actually teach away from Applicants claimed invention.

Therefore, it is respectfully submitted that Strauss does not anticipate nor render obvious to one of ordinary skill in the art Applicants' claimed invention. Favorable reconsideration and withdrawal of the Examiner's rejection of claims 1, 5, 7, 8 and 10-20 over Strauss are therefore respectfully requested.

The Examiner has also rejected the claims of record for double patenting over the claims of U.S. Patent No. 6,331,350. In rendering the rejection, the Examiner notes that the viscosity limitation in the present claims, would be expected to be an "inherent" property in the claimed invention of U.S. Patent No. 6,331,350. For the following reasons, however, the Examiners rejection is most respectfully traversed by Applicants.

The viscosity range is <u>not</u> an inherent feature of the binder system. A declaration pursuant to 37 C.F.R. § 132 was submitted in Applicants' last response. The Declaration was made by Derek C. Bristol, as to the fact that such a viscosity range is not an inherent feature of the binder system. The viscosity of a binder

system as detailed in the previously submitted Declaration, can vary greatly outside of the range of 20 cP to 100cP as a viscosity depends on and can change due to many factors. The type of polycarboxy polymer used, whether a copolymer component, and whether the polymer is more branched or linear, all can impact the viscosity. The presence of viscosity modifiers can also ultimately determine the viscosity. Thus, as stated by Mr. Bristol in his Declaration, the viscosity of a binder would not necessarily i.e., not inherently, be in the range of from 20cP to 100cP. The fact that it may not necessarily i.e., not inherently, be in the range is believed sufficient to defeat the suggested "inherent" basis for the Examiner's rejections.

Inherency must be a certainty. See for example Ex parte Cyba (Patent Office Board of Appeals, 1966) 155 USPQ 756; Ex parte McQueen (Patent Office Board Appeals, 1958) USPQ 37. Inherency must be a necessary result and not merely a possible result. See Ex parte Keith et al. (Patent Office Board of Appeals, 1966) 154 USPQ 320. This requirement to employ the doctrine of inherency is a well established, long established rule as noted by the above cases and recognized by the U.S. Patent and Trademark Office. The Declaration by Mr. Bristol that the viscosity of a binder would not necessarily be in the claimed range, specifically goes to the issue of inherency, and specifically demonstrates that the viscosity would not be a certain result and therefore could not be considered an inherent feature as suggested by the Examiner. Indeed, Strauss, with its inclusion of high molecular weight polymer, shows how the viscosity can be impacted adversely.

This being the case, it is submitted that the claimed subject matter of the present application and the claimed subject matter of the '350 patent do not overlap. One practicing the claimed subject matter of the '350 patent would not necessary

infringe any of the claims of the present application, and one practicing the claimed subject matter of the present application would not necessarily infringe any of the claims of '350 patent. Additional considerations would have to be made in each case. Therefore, it is believed that the double patenting rejection is not proper, and favorable reconsideration of the Examiner's obviousness type double patenting rejection is most respectfully requested.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

Respectfully submitted,

Date: August 5, 2005

By: _____
E. Joseph Gess
Registration No. 28,510

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

I hereby certify that this correspondence is being sent by Facsimile Transmission to the Assistant Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

Date: Aug. 5, 2005
Name: Genet Smith
(Typed or printed name of person signing the certificate)
Sign: Genet Smith
(Signature of person signing the certificate)
Date: Aug. 5, 2005
(Date of Signature)